Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for receiving at least one desired communication signal in a wireless communication system, the method comprising:

receiving a plurality of communication signals;

selecting communication signals of the plurality of communication signals, the selected communication signals including each desired communication signal and at least one undesired communication signal originating from another cell, the selected communication determined by identifying the another cell and identifying the selected undesired communication of the another cell;

producing a channel estimate for each selected communication signal based on the cell of that selected undesired communication; and

jointly detecting data of the selected communication signals.

2. (Original) The method of claim 1 wherein the selecting of communication signals is based on a received power of each communication signal.

3. (Original) The method of claim 2 wherein the selected communication signals have a received power exceeding a threshold.

4. (Original) The method of claim 2 wherein the selected communication signals number a fixed value of N.

5. (Original) The method of claim 1 wherein the selecting of communication signals is based on a received power of each communication signal per symbol.

6. (Original) The method of claim 1 wherein the selecting of communication signals is based on a received power of each communication signal over a specified time period.

7. (Original) The method of claim 1 wherein the wireless communication system is a time divided code division multiple access communication system and the producing channel estimates is by implementing a Steiner algorithm for a plurality of cells.

8. (Original) The method of claim 7 wherein the time divided code division multiple access communication system is a time division duplex wideband code division multiple access communication system.

9. (Original) The method of claim 7 wherein the time divided code division multiple access communication system is a time division synchronous code division multiple access communication system.

10. (Original) The method of claim 1 wherein at least one communication signal from another cell includes a communication signal transmitted from one wireless transmit/receive unit for reception by another wireless transmit/receive unit.

11. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

means for receiving a plurality of communication signals;

means for selecting communication signals of the plurality of communication signals, the selected communication signals including each desired communication signal and at least one undesired communication signal originating from another cell, the selected undesired communication determined by identifying the another cell and identifying the selected undesired communication of the another cell;

means for producing a channel estimate for each selected communication signal based on the cell of that selected undesired communication signal; and

means for jointly detecting data of the selected communication signals.

12. (Original) The wireless transmit/receive unit of claim 11 wherein the selecting of communication signals is based on a received power of each communication signal.

13. (Original) The wireless transmit/receive unit of claim 12 wherein the selected communication signals have a received power exceeding a threshold.

14. (Original) The wireless transmit/receive unit of claim 12 wherein the selected communication signals number a fixed value of N.

15. (Original) The wireless transmit/receive unit of claim 11 wherein the selecting of communication signals is based on a received power of each communication signal per symbol.

16. (Original) The wireless transmit/receive unit of claim 11 wherein the selecting of communication signals is based on a received power of each communication signal over a specified time period.

17. (Original) The wireless transmit/receive unit of claim 11 wherein the received communication signals are in a time divided code division multiple access format and the producing channel estimates is by implementing a Steiner algorithm for a plurality of cells.

18. (Original) The wireless transmit/receive unit of claim 17 wherein the time divided code division multiple access format is a time division duplex wideband code division multiple access format.

19. (Original) The wireless transmit/receive unit of claim 17 wherein the time divided code division multiple access format is a time division synchronous code division multiple access format.

20. (Original) The wireless transmit/receive unit of claim 11 wherein at least one communication signal from another cell includes a communication signal transmitted from one wireless transmit/receive unit for reception by another wireless transmit/receive unit.

21. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

an antenna receiving a plurality of communication signals;

a communication selection device selects communication signals of the plurality of communication signals, the selected communication signals including each desired communication signal and at least one undesired communication signal originating from another cell, the selected undesired communication

determined by identifying the another cell and identifying the selected undesired communication of the another cell;

a multiple source channel estimation device and a channel estimate selector/combiner produces a channel estimate for each selected communication signal based on the cell of that selected undesired communication signal; and

a joint detector jointly detects data of the selected communication signals.

22. (Original) The wireless transmit/receive unit of claim 21 wherein the communication selection device selects communication signals is based on a received power of each communication signal.

23. (Original) The wireless transmit/receive unit of claim 22 wherein the communication selection device selects communication signals having a received power exceeding a threshold.

24. (Original) The wireless transmit/receive unit of claim 22 wherein the communication selection device selects communication signals totaling a fixed number of N.

25. (Original) The wireless transmit/receive unit of claim 21 wherein the communication selection device selects communication signals based on a received power of each communication signal per symbol.

26. (Original) The wireless transmit/receive unit of claim 21 wherein the communication selection device selects communication signals based on a received power of each communication signal over a specified time period.

27. (Original) The wireless transmit/receive unit of claim 21 wherein the received communication signals are in a time divided code division multiple access format and the producing channel estimates is by implementing a Steiner algorithm for a plurality of cells.

28. (Original) The wireless transmit/receive unit of claim 27 wherein the time divided code division multiple access format is a time division duplex wideband code division multiple access format.

29. (Original) The wireless transmit/receive unit of claim 27 wherein the time divided code division multiple access format is a time division synchronous code division multiple access format.

30. (Original) The wireless transmit/receive unit of claim 21 wherein at least one communication signal from another cell includes a communication signal transmitted from one wireless transmit/receive unit for reception by another wireless transmit/receive unit.

31. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

means for receiving a plurality of communication signals;

means for selecting communication signals of the plurality of communication signals, the selected communication signals including each desired communication signal and at least one undesired communication signal originating from another cell, the selected undesired communication determined by identifying the another cell and identifying the selected undesired communication of the another cell;

means for producing a channel estimate for each selected communication signal based on the cell of that selected undesired communication signal; and

means for jointly detecting data of the selected communication signals.

32. (Original) The base station of claim 31 wherein the selecting of communication signals is based on a received power of each communication signal.

33. (Original) The base station of claim 32 wherein the selected communication signals have a received power exceeding a threshold.

34. (Original) The base station of claim 32 wherein the selected communication signals number a fixed value of N.

35. (Original) The base station of claim 31 wherein the selecting of communication signals is based on a received power of each communication signal per symbol.

36. (Original) The base station of claim 31 wherein the selecting of communication signals is based on a received power of each communication signal over a specified time period.

37. (Original) The base station of claim 31 wherein the received communication signals are in a time divided code division multiple access format and the producing channel estimates is by implementing a Steiner algorithm for a plurality of cells.

38. (Original) The base station of claim 37 wherein the time divided code division multiple access format is a time division duplex wideband code division multiple access format.

39. (Original) The base station of claim 37 wherein the time divided code division multiple access format is a time division synchronous code division multiple access format.

40. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

an antenna receiving a plurality of communication signals;

a communication selection device selects communication signals of the plurality of communication signals, the selected communication signals including each desired communication signal and at least one undesired communication signal originating from another cell, the selected undesired communication determined by identifying the another cell and identifying the selected undesired communication of the another cell;

a multiple source channel estimation device and a channel estimate selector/combiner produces a channel estimate for each selected communication signal based on the cell of that selected undesired communication signal; and

a joint detector jointly detects data of the selected communication signals.

41. (Original) The base station of claim 40 wherein the communication selection device selects communication signals is based on a received power of each communication signal.

42. (Original) The base station of claim 41 wherein the communication selection device selects communication signals having a received power exceeding a threshold.

43. (Original) The base station of claim 41 wherein the communication selection device selects communication signals totaling a fixed number of N.

44. (Original) The base station of claim 40 wherein the communication selection device selects communication signals based on a received power of each communication signal per symbol.

45. (Original) The base station of claim 40 wherein the communication selection device selects communication signals based on a received power of each communication signal over a specified time period.

46. (Original) The base station of claim 40 wherein the received communication signals are in a time divided code division multiple access format and the producing channel estimates is by implementing a Steiner algorithm for a plurality of cells.

47. (Original) The base station of claim 46 wherein the time divided code division multiple access format is a time division duplex wideband code division multiple access format.

48. (Original) The base station of claim 46 wherein the time divided code division multiple access format is a time division synchronous code division multiple access format.

49. (Withdrawn) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

an antenna receiving a plurality of communication signals;

a plurality of channel estimation devices, each channel estimation device for estimating channel responses for a particular cell's transmissions;

a plurality of blind code detection devices, each blind code detection devices for detecting codes used in a particular cell;

a code selection device selects codes based on a result of each blind code detection device;

a channel estimate combiner for producing estimated channel responses corresponding to the selected codes; and

a joint detector having inputs configured to receive the selected codes and the produced estimated channel responses and detecting data of the selected communication signals.

50. (Withdrawn) A base station for receiving at least one desired communication signal, the base station comprising:

an antenna receiving a plurality of communication signals;

a plurality of channel estimation devices, each channel estimation device for estimating channel responses for a particular cell's transmissions;

a plurality of blind code detection devices, each blind code detection devices for detecting codes used in a particular cell, excluding a cell of the base station;

a code selection device selects codes based on a result of each blind code detection device and codes of a cell of the base station;

a channel estimate combiner for producing estimated channel responses corresponding to the selected codes; and

a joint detector having inputs configured to receive the selected codes and the produced estimated channel responses and detecting data of the selected communication signals.

51. (Previously Presented) A method for receiving at least one desired communication signal, the method comprising:

providing a joint detector capable of processing N communication signals;

receiving a plurality of communication signals;

selecting N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a

highest received power level; the selecting of the N communication signals evaluates communication signals of multiple identified cells; and

jointly detecting data of the N selected communication signals using the joint detector.

52. (Previously Presented) The method of claim 51 wherein the selecting N communication signals includes all of the communication signals of a cell of the joint detector.

53. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

joint detecting means capable of processing N communication signals;

means for receiving a plurality of communication signals;

means for selecting N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level; the selecting of the N communication signals evaluates communication signals of multiple identified cells; and

the joint detecting means for joint detecting data of the N selected communication signals.

54. (Original) The wireless transmit/receive unit of claim 53 wherein the selecting N communication signals includes all of the communication signals of a cell of the joint detecting means.

55. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

a joint detector capable of processing N communication signals;

an antenna receiving a plurality of communication signals;

a communication selector for selecting N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level; the selecting of the N communication signals evaluates communication signals of multiple cells; and

the joint detector jointly detecting data of the N selected communication signals.

56. (Original) The wireless transmit/receive unit of claim 55 wherein the selecting N communication signals includes all of the communication signals of a cell of the joint detector.

57. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

joint detecting means capable of processing N communication signals;

means for receiving a plurality of communication signals;

means for selecting N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level; the selecting of the N communication signals evaluates communication signals of multiple cells; and

the joint detecting means for joint detecting data of the N selected communication signals.

58. (Original) The base station of claim 57 wherein the selecting N communication signals includes all of the communication signals of a cell of the joint detecting means.

59. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

a joint detector capable of processing N communication signals;

an antenna receiving a plurality of communication signals;

a communication selector for selecting N communication signals of the plurality of communication signals, the selected N communication signals including

each desired communication signal and having other undesired communication signals having a highest received power level; the selecting of the N communication signals evaluates communication signals of multiple identified cells; and

the joint detector jointly detecting data of the N selected communication signals.

60. (Original) The base station of claim 59 wherein the selecting N communication signals includes all of the communication signals of a cell of the joint detector.

61. (Previously Presented) A method for receiving at least one desired communication signal, the method comprising:

providing a joint detector capable of processing N communication signals;

receiving a plurality of communication signals;

selecting at a maximum of N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level exceeding a threshold value; the selecting of the maximum of N communication signals evaluates communication signals of multiple identified cells; and

jointly detecting data of the N selected communication signals using the joint detector.

62. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

a joint detecting means capable of processing N communication signals;

means for receiving a plurality of communication signals;

means for selecting at a maximum of N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level exceeding a threshold value; the selecting of the maximum of N communication signals evaluates communication signals of multiple identified cells; and

the joint detecting means for jointly detecting data of the N selected communication signals using the joint detector.

63. (Previously Presented) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

a joint detector capable of processing N communication signals;

an antenna for receiving a plurality of communication signals;

a communication selector for selecting at a maximum of N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level exceeding a threshold value; the selecting of the maximum of N communication signals evaluates communication signals of multiple identified cells; and

the joint detector for jointly detecting data of the N selected communication signals using the joint detector.

64. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

a joint detecting means capable of processing N communication signals;

means for receiving a plurality of communication signals;

means for selecting at a maximum of N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level exceeding a threshold value; the selecting of the maximum of N communication signals evaluates communication signals of multiple identified cells; and

the joint detecting means for jointly detecting data of the N selected communication signals using the joint detector.

65. (Previously Presented) A base station for receiving at least one desired communication signal, the base station comprising:

a joint detector capable of processing N communication signals;

an antenna for receiving a plurality of communication signals;

a communication selector for selecting at a maximum of N communication signals of the plurality of communication signals, the selected N communication signals including each desired communication signal and having other undesired communication signals having a highest received power level exceeding a threshold value; the selecting of the maximum of N communication signals evaluates communication signals of multiple identified cells; and

the joint detector for jointly detecting data of the N selected communication signals using the joint detector.

66. (Withdrawn) A method for receiving at least one desired communication signal, the method comprising:

receiving a plurality of communication signals;

providing a communication selecting device for selecting communication signals, the communication selecting device selectively operates in a plurality of modes, the modes including a first mode where only communication signals from a cell of the communication selecting device are selected and a second mode where communication signals from multiple identified cells are potentially selected; and

jointly detecting data of the selected communication signals.

67. (Withdrawn) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

means for receiving a plurality of communication signals;

communication selecting means for selecting communication signals, the communication selecting device selectively operates in a plurality of modes, the modes including a first mode where only communication signals from a cell of the communication selecting device are selected and a second mode where communication signals from multiple identified cells are potentially selected; and

means for jointly detecting data of the selected communication signals.

68. (Withdrawn) A wireless transmit/receive unit for receiving at least one desired communication signal, the wireless transmit/receive unit comprising:

an antenna receiving a plurality of communication signals;

a communication selecting device for selecting communication signals, the communication selecting device selectively operates in a plurality of modes, the modes including a first mode where only communication signals from a cell of the communication selecting device are selected and a second mode where communication signals from multiple identified cells are potentially selected; and

a joint detector jointly detecting data of the selected communication signals.

69. (Withdrawn) A base station for receiving at least one desired communication signal, the base station comprising:

means for receiving a plurality of communication signals;

communication selecting means for selecting communication signals, the communication selecting device selectively operates in a plurality of modes, the modes including a first mode where only communication signals from a cell of the communication selecting device are selected and a second mode where communication signals from multiple identified cells are potentially selected; and

means for jointly detecting data of the selected communication signals.

70. (Withdrawn) A base station for receiving at least one desired communication signal, the base station comprising:

an antenna receiving a plurality of communication signals;

a communication selecting device for selecting communication signals, the communication selecting device selectively operates in a plurality of modes, the modes including a first mode where only communication signals from a cell of the communication selecting device are selected and a second mode where communication signals from multiple identified cells are potentially selected; and

a joint detector jointly detecting data of the selected communication signals.